

## ARGUMENTS

The Office Action mailed May 18, 2007 has been carefully considered. Within the Office Action Claims 1-9, 13 and 14 have been rejected. The Applicants have amended Claims 1-9 and 13-14. Reconsideration in view of the following remarks is respectfully requested. A one month extension fee is included with this reply.

### The 35 U.S.C. § 112, Second Paragraph Rejection

Claim 1 is rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicants regards as the invention. In particular, it is stated in the office action that Claims 1-9 are allegedly vague and indefinite as to whether the resistance is referring to the graphite, the electrically conductive material (without the graphite) or the matrix itself. This rejection is respectfully traversed.

Under M.P.E.P. 2173.02, in reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent. The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

(A) The content of the particular application disclosure;

(B) The teachings of the prior art; and

(C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

In determining definiteness, the examiner should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. Examiners are encouraged to suggest claim language to applicants to improve the clarity or precision of the language used, but should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirement. M.P.E.P. 2173.02. Within Applicants' claims and specification, it is expressly stated on Page 3 that the electrically conducting material has an electric resistance lower than  $200\ \mu\Omega\cdot\text{cm}$ . Accordingly, one skilled in the art reading Applicants' specification would understand the clarity and precision of this limitation. For at least these reasons, Claim 1 is clear and definite under 35 USC 112, second paragraph.

#### Claim Rejections – 35 USC §102

In the Office Action, Claims 1, 7, 10 and 13-14 were rejected under 35 USC §102(b) as being allegedly anticipated by Gessinger et al (US 4707576) and Swift et al (US 5599615), individually. The Applicants respectfully traverse.

According to the M.P.E.P., a claim is anticipated under 35 U.S.C. § 102(a), (b) and (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

#### Gessinger

Within the Office Action, it is stated that Gessinger discloses arcing contact tips (6,8) made from a carbon fiber reinforced graphite and a metal carrier (or matrix) (col 3 L 62). The Applicants respectfully disagree. A careful read of Gessinger uncovers that Column 3, Lines 62- as well as Figure 2 is directed to soldering a carbon-fiber-reinforced graphite to a metal carrier,

such as a molybdenum platelet which is joined to the graphite platelet 25. In other words, Gessinger describes that the carbon-fiber graphite is affixed externally to the metal carrier. However, there is absolutely no express or inherent disclosure in Gessinger that carbon fibres are embedded in a matrix, whereby the matrix comprises a primary matrix which is formed by impregnating the carbon fibres with carbon in the form of graphite, as recited in Claims 1, 13 and 14. Furthermore, Gessinger does not disclose anywhere therein that the primary matrix is impregnated with a plurality of inset spaces filled with electrically conducting material having a resistance lower than  $200\ \mu\Omega\cdot\text{cm}$ , as recited in Claims 1, 13 and 14. Considering that Gessinger does not disclose expressly or inherently each and every element/limitation of Claims 1, 13 and 14, these claims are distinguishable over Gessinger. For at least these reasons, Claims 1, 13 and 14 are allowable over Gessinger.

#### Swift

As discussed in regards to Gessinger, Swift does not disclose that carbon fibres are embedded in a matrix, whereby the matrix comprises a primary matrix which is formed by impregnating the carbon fibres with carbon in the form of graphite, as recited in Claims 1, 13 and 14. Furthermore, Gessinger does not disclose anywhere therein that the primary matrix is impregnated with a plurality of inset spaces filled with electrically conducting material having a resistance lower than  $200\ \mu\Omega\cdot\text{cm}$ , as recited in Claims 1, 13 and 14.

In addition, Claim 13 additionally recites a fixed and mobile contact device, each device being equipped with an arcing contact element, these two contact elements being capable of presenting a first mutual contact position and a second mutual switching off position in which they are separated from each other, characterised by at least one arcing contact element being capable of occupying during operation an initial position in which it is in contact with another contact element as well as a second position in which it is separated from this other contact

element so as to allow interruption of the current in the equipment. There is absolutely no description or disclosure in Swift of these elements/limitations and, therefore a proper *prima facie* case of anticipation has not been established.

Further, Claim 14 recites, among other things, a switching off chamber equipped with a contact assembly, said contact assembly being capable of occupying during operation an initial position in which said contact assembly is in contact with another contact element as well as a second position in which said contact assembly is separated from said another contact element so as to allow interruption of the current in the equipment. There is absolutely no description or disclosure in Swift of these elements/limitations and, therefore a proper *prima facie* case of anticipation has not been established.

Considering that Swift does not disclose expressly or inherently each and every element/limitation of Claims 1, 13 and 14, these claims are distinguishable over Swift. For at least these reasons, Claims 1, 13 and 14 are allowable over Swift.

#### Claim Rejections – 35 USC §103

In the Office Action, Claims 1-9 and 13-14 were rejected under 35 USC §103 as being unpatentable over EP 0729162 A1 and FR 2115865. This rejection is respectfully traversed.

Specifically, the Office Action admits that the prior art does not teach that carbon fiber and graphite fiber are used together nor do they disclose the resistance limitation of Claims 1, 13 and 14. However, the Office Action contends that one skilled in the art would use carbon and graphite interchangeably because both are from the same element and have similar properties. The Applicants respectfully disagree for the reasons set forth below.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991).

In determining obviousness four factual inquiries must be looked into in regards to determining obviousness. These are determining the scope and content of the prior art; ascertaining the differences between the prior art and the claims in issue; resolving the level of ordinary skill in the pertinent art; and evaluating evidence of secondary consideration. Graham v. John Deere, 383 U.S. 1 (1966); KSR Int'l Co. v. Teleflex, Inc., No 04-1350 (U.S. Apr. 30, 2007) (“Often, it will be necessary . . . to look into related teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an **apparent reason** to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis **should be made explicit.**”) (emphasis added).

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530 (Fed. Cir. 1983). Thus, when considering the whole prior art reference its entirety, portions that would lead away from the claimed invention must be considered. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983), See M.P.E.P. 2141.02. Thus, it is improper to combine references where the references teach away from their combination. In re Grasselli, 713 F.2d 731 (Fed. Cir. 1983).

As stated above, to successfully establish a prima facie case of obviousness, all

elements/limitations must taught or suggested in the prior art. In the present case, the foreign references when combined does not teach or suggest that carbon fibres are embedded in a matrix, whereby the matrix comprises a primary matrix which is formed by impregnating the carbon fibres with carbon in the form of graphite, as recited in Claims 1, 13 and 14. Furthermore, the combination of the foreign references do not teach or suggest anywhere therein that the primary matrix is impregnated with a plurality of inset spaces filled with electrically conducting material having a resistance lower than  $200\ \mu\Omega\cdot\text{cm}$ , as recited in Claims 1, 13 and 14.

In addition, Claim 13 additionally recites a fixed and mobile contact device, each device being equipped with an arcing contact element, these two contact elements being capable of presenting a first mutual contact position and a second mutual switching off position in which they are separated from each other, characterised by at least one arcing contact element being capable of occupying during operation an initial position in which it is in contact with another contact element as well as a second position in which it is separated from this other contact element so as to allow interruption of the current in the equipment. Neither foreign reference, together or individually teaches or discloses all the elements/limitations in Claim 13. Accordingly, no prima facie case of obviousness has not been established in regards to Claim 13, and therefore Claim 13 is allowable.

Further, Claim 14 recites, among other things, a switching off chamber equipped with a contact assembly, said contact assembly being capable of occupying during operation an initial position in which said contact assembly is in contact with another contact element as well as a second position in which said contact assembly is separated from said another contact element so as to allow interruption of the current in the equipment. Neither foreign reference, together or individually teaches or discloses all the elements/limitations in Claim 14. Accordingly, no prima facie case of obviousness has not been established in regards to Claim 14, and therefore Claim 14 is allowable.

With respect to the rejections to dependent Claims 2-9, these claims are dependent on Claim 1 and are therefore allowable for being dependent on an allowable base claim.

Conclusion

It is believed that this reply places the above-identified patent application into condition for allowance. Early favorable consideration of this reply is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-1698. A one month extension is included with this reply.

Respectfully submitted,  
THELEN REID BROWN RAYSMAN & STEINER LLP

A handwritten signature in black ink, appearing to read 'S. Bhattacharya', written over a horizontal line.

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